

WHAT IS CLAIMED IS:

1. A method of printing over a network, comprising the steps of:  
uploading, via the network, to a printing service provider, print data information and location information;  
determining identification information based on the uploaded location information;  
correlating, at the printing service provider, the determined identification information with the uploaded print data information;  
inputting the identification information at a printing device connected to the network;  
transmitting the print data information having the correlated identification information from the printing service provider to the printing device; and  
printing the print data information on the printing device.
2. A method according to Claim 1, wherein the location information comprises a network address from which the uploading step is initiated.
3. A method according to Claim 2, wherein the network address is dynamically determined when a user connects a computing device, from which the uploading step is to be performed, to the network.
4. A method according to Claim 3, wherein the network address is dynamically determined by a hotel server when the user connects the computing device to a network connection in the hotel.
5. A method according to Claim 1, further comprising the steps of:

after the uploading step, the printing service provider querying a server corresponding to the location information for the identification information;

the server corresponding to the location information performing the determining step; and

the server corresponding to the location information transmitting the determined identification information to the printing service provider.

6. A method according to Claim 5, wherein the location information comprises hotel information, the server corresponding to the location information comprises a hotel server, and the identification information comprises room key information.

7. A method according to Claim 1, wherein the location information comprises hotel information and the identification information comprises hotel room key information.

8. A method according to Claim 1, wherein the identification information is credit card information.

9. A server apparatus that performs computer executable process steps for printing over a network, comprising:

a processor for executing computer executable process steps; and  
a memory medium storing the computer executable process steps, the computer executable process steps comprising (a) detecting connection of a client computer to a local area network connected to the server apparatus, (b) assigning a network address to the detected client computer, (c) receiving a query from another server apparatus connected to the network for identification information corresponding to the assigned network address, (d) determining the identification information corresponding to the assigned

network address received in the query, and (e) responding to the query from the another server apparatus with the determined identification information.

10. A server apparatus according to Claim 9, wherein the identification information is room key information.

11. A server apparatus according to Claim 9, wherein the identification information is credit card information.

12. A server apparatus according to Claim 9, further comprising, after the assigning step, adding the assigned network address to an upload operation in which print data information and the assigned network address are uploaded to the another server apparatus.

13. A server apparatus according to Claim 12, wherein the another server apparatus comprises a printing service server that receives the print data information and the assigned network address in the upload operation, and queries the server apparatus for the identification information.

14. A server apparatus that performs computer executable process steps for printing over a network, comprising:  
a processor for executing computer executable process steps; and  
a memory medium storing the computer executable process steps, the computer executable process steps comprising (a) receiving, via the network, uploaded print data information and location information, (b) querying another server apparatus corresponding to the location information for identification information corresponding to the location information, (c) receiving the identification information from the another server apparatus in response to the query, (d) storing the received identification information in correspondence with the uploaded print data information, (e) receiving the identification information from a printing device, and (f) in response to the

received identification information, transmitting to the printing device the print data information stored in correspondence to the identification information.

15. A server apparatus according to Claim 14, wherein the location information is a network address assigned to a client computer by the another server, the client computer performing an uploading operation in which uploaded print data information and location information are received by the server apparatus.

16. A server apparatus according to Claim 15, wherein the identification information comprises room key information.

17. A server apparatus according to Claim 15, wherein the identification information is credit card information.

18. A method of printing over a network, comprising the steps of:

uploading, via the network, to a printing service provider, print data information, location information and user identification information;

determining key information based on the uploaded user identification information;

correlating, at the printing service provider, the determined key information with the uploaded print data information;

inputting the key information at a printing device connected to the network;

transmitting the print data information having the correlated key information from the printing service provider to the printing device; and

printing the print data information on the printing device.

19. A method according to Claim 18, wherein the location information identifies a hotel and the user identification information identifies a hotel guest.

20. A method according to Claim 19, wherein the user identification information is issued to the hotel guest by the hotel.

21. A method according to Claim 18, wherein the key information is hotel room key information.

22. A method according to Claim 18, wherein the user identification information is credit card information.

23. A method according to Claim 18 further comprising the steps of:

after the uploading step, the printing service provider determining a server corresponding to the uploaded location information; querying the determined server corresponding to the location information for the key information based on the uploaded user identification information;

the determined server performing the determining step to determine the key information based on the uploaded user identification information; and

the determined server transmitting the determined key information to the printing service provider.

24. A method of printing over a network, comprising the steps of:

uploading, via the network, to a printing service provider, print data information and associated user identification information;

inputting the user identification information at a printing device connected to the network;

determining whether a user corresponding to the user identification information input in the inputting step is a registered user authorized to print at the printing device;

in a case where the determining step determines a positive result, transmitting the print data information having associated user identification information corresponding to the input user identification information to the printing device; and

printing the print data information on the printing device.

25. A method according to Claim 24 further comprising the steps of:

after the inputting step, the printing device transmitting the input user identification information and device identification information identifying the device in which the inputting step is performed to the printing service provider;

the printing service provider determining a server corresponding to the device identification information; and

the printing service provider querying the determined server whether a user corresponding to the input user identification information is registered with the server, the server performing the determining step in response to the query, and the server responding to the query with the result of the determining step.

26. A method according to Claim 24, wherein the user identification information is credit card information.

27. Computer-executable process steps for printing over a network, the process steps comprising:

uploading, via the network, to a printing service provider, print data information and location information;

determining identification information based on the uploaded location information;

correlating, at the printing service provider, the determined identification information with the uploaded print data information;

inputting the identification information at a printing device connected to the network;

transmitting the print data information having the correlated identification information from the printing service provider to the printing device; and

printing the print data information on the printing device.

28. Computer executable process steps according to Claim 27, further comprising the steps of:

after the uploading step, the printing service provider querying a server corresponding to the location information for the identification information;

the server corresponding to the location information performing the determining step; and

the server corresponding to the location information transmitting the determined identification information to the printing service provider.

29. A computer-readable medium that stores computer executable process steps for printing over a network, the computer executable process steps comprising the steps of:

uploading, via the network, to a printing service provider, print data information and location information;

determining identification information based on the uploaded location information;

correlating, at the printing service provider, the determined identification information with the uploaded print data information;

inputting the identification information at a printing device connected to the network;

transmitting the print data information having the correlated identification information from the printing service provider to the printing device; and

printing the print data information on the printing device.

30. A computer-readable medium according to Claim 29, wherein the computer executable process steps further comprise the steps of:

after the uploading step, the printing service provider querying a server corresponding to the location information for the identification information;

the server corresponding to the location information performing the determining step; and

the server corresponding to the location information transmitting the determined identification information to the printing service provider.

31. Computer executable process steps for printing over a network, comprising the steps of:

uploading, via the network, to a printing service provider, print data information, location information and user identification information;

determining key information based on the uploaded user identification information;

correlating, at the printing service provider, the determined key information with the uploaded print data information;

inputting the key information at a printing device connected to the network;

transmitting the print data information having the correlated key information from the printing service provider to the printing device; and



printing the print data information on the printing device.

32. Computer executable process steps according to Claim 31, further comprising the steps of:

after the uploading step, the printing service provider  
determining a server corresponding to the uploaded location information;  
querying the determined server corresponding to the location  
information for the key information based on the uploaded user identification  
information;

the determined server performing the determining step to  
determine the key information based on the uploaded user identification  
information; and

the determined server transmitting the determined key  
information to the printing service provider.

33. A computer-readable medium which stores computer  
executable process steps for printing over a network, the computer executable  
process steps comprising the steps of:

uploading, via the network, to a printing service provider, print  
data information and associated user identification information;

inputting the user identification information at a printing device  
connected to the network;

determining whether a user corresponding to the user  
identification information input in the inputting step is a registered user  
authorized to print at the printing device;

in a case where the determining step determines a positive result,  
transmitting the print data information having associated user identification  
information corresponding to the input user identification information to the  
printing device; and

printing the print data information on the printing device.

34. A computer-readable medium according to Claim 33, wherein the computer executable process steps further comprise the steps of:  
after the inputting step, the printing device transmitting the input user identification information and device identification information identifying the device in which the inputting step is performed to the printing service provider;

the printing service provider determining a server corresponding to the device identification information; and

the printing service provider querying the determined server whether a user corresponding to the input user identification information is registered with the server, the server performing the determining step in response to the query, and the server responding to the query with the result of the determining step.

35. A method of printing over a network, comprising the steps of:

uploading, to a printing service provider, print data information and hotel guest information;

inputting, at a printing device, the hotel guest information;

transmitting the uploaded print data information to the printing device in response to the inputting step; and

printing the print data information on the printing device.

36. A method according to Claim 35, wherein the uploading step is performed by a hotel server.

37. A method according to Claim 35, wherein the hotel guest information comprises room key information.

38. A method according to Claim 36, wherein the print data information comprises billing information, and the hotel guest information comprises room key information.

39. A method according to Claim 36, wherein the uploading step is performed by the hotel server in response to a request by a hotel guest for printing of billing information.

40. A method according to Claim 39, wherein the request is made by the hotel guest utilizing a video check-out.

41. A method of printing over a network, comprising the steps of:

uploading, via the network and from a first location, to a printing service provider, print data information and location information of the first location;

a first determining step of determining first identification information of a user based on the uploaded first location information;

correlating, at the printing service provider, the determined first identification information with the uploaded print data information;

inputting second identification information of the user at a printing device connected to the network at a second location;

a second determining step of determining the first identification information of the user corresponding to the input second identification information;

transmitting the print data information having the correlated first identification information from the printing service provider to the printing device; and

printing the print data information on the printing device.

42. A method according to Claim 41, wherein the first determining step comprises the steps of:

- the printing service provider determining a first server corresponding to the uploaded first location information and querying the first server for the first identification information;

- the first server determining the first identification information corresponding to the first location information; and

- the first server transmitting the determined first identification information to the printing service provider.

43. A method according to Claim 41, wherein the second determining step comprises the steps of:

- the printing service provider determining a second server corresponding to location information of the printing device;

- the printing service provider querying the second server for the first identification information of the user corresponding to the second identification information; and

- the second server transmitting the determined second identification information to the printing service provider.

44. A method according to Claim 41, wherein the first determining step comprises the steps of:

- the printing service provider determining a first server corresponding to the uploaded first location information and querying the first server for the first identification information;

- the first server determining the first identification information corresponding to the first location information; and

- the first server transmitting the determined first identification information to the printing service provider, and

- wherein the second determining step comprises the steps of:

the printing service provider determining a second server corresponding to location information of the printing device;

the printing service provider querying the second server for the first identification information of the user corresponding to the second identification information; and

the second server transmitting the determined second identification information to the printing service provider.

45. A method according to Claim 41, wherein the first identification information comprises a username of the user.

46. A method according to Claim 45, wherein the second identification information is hotel room key information.

47. A method according to Claim 41, wherein the first location information comprises a hotel room network address in a first hotel and the second location comprises a second hotel.

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